

Appl. No. 010/001,423  
Amdt. Dated September 17, 2003  
Reply to Office Action of July 22, 2003

**B. Amendment to the Abstract**

Please replace the abstract appearing on page 20 with the following amended paragraph:

*C2*  
~~Novel multilaminated nano-engineered devices and methods of forming multi-layer devices that exhibit quantum confinement effects are disclosed. Benefits of multi-layer sensing, piezoelectric, photonic, biomedical, and thermal devices based on nanomaterials are disclosed. Quantum confined device layer thickness can be in the range of 1 nm to 10 cm, a preferred thickness being less than 10 microns, and a most preferred thickness being less than 1 micron. Devices can be built using chalcogenides, oxides, nitrides, borides, phosphides, halides, silicates, hydrides, oxynitrides, oxycarbides, and other complex compositions. Sensors for monitoring environmental variables such as chemical composition are disclosed. These low cost sensors comprise multiple layers in a laminated stack. Very high numbers of sensing layers (e.g., 500) may be incorporated into a single laminated sensor device. The sensors may be produced from nanostructured materials. Additionally, multi-layer magnetic, optical, photonic, thermal and biomedical sensors are disclosed. Nano-engineered devices exhibiting quantum effect and methods for forming such devices from nanomaterials are disclosed. Multilaminated sensing, piezoelectric, photonic, biomedical and thermal devices are taught. The compositions included are chalcogenides, oxides, nitrides, borides, carbides, phosphides, halides, silicates, hydrides, oxynitrides, oxycarbides and other complex nanomaterials compositions.~~